Mr. Charlie Weber Erler Industries P. O. Box 219 North Vernon, IN 47265

Re: 079-16437

Minor Permit Modification to:

Part 70 permit No.: T079-7572-00010

Dear Mr. Weber:

Erler Industries was issued Part 70 operating permit T079-7572-00010 on September 23, 1998 for the operation of a plastic and metal parts spray painting facility. An application to modify the source was received on July 23, 2002. Pursuant to the provisions of 326 IAC 2-7-12 a minor permit modification to this permit is hereby approved in order to incorporate the new emission units at the source as described in the attached Technical Support Document.

The modification consists of the addition of the following emission units:

(1) One (1) paint line, identified as Plant 3, Line 4, consisting of three (3) spray booths, identified as EU-19, EU-20, and EU-21, with a maximum capacity of 625 parts per hour total, equipped with HVLP spray equipment, controlled by fabric filters, exhausting through stacks identified as SV-19, SV-20, and SV-21.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Madhurima Moulik, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Madhurima Moulik or extension 3-0868, or dial (317) 233-0868.

Sincerely, Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

# Attachments

mm

cc: File - Jennings County

Jennings County Health Department Air Compliance Section Inspector - Joe Foyst Compliance Data Section - Karen Nowak

Administrative and Development

Technical Support and Modeling - Michele Boner

# PART 70 OPERATING PERMIT and ENHANCED NEW SOURCE REVIEW OFFICE OF AIR QUALITY

Erler Industries, Inc.

# 418 Stockwell Street, North Vernon, Indiana 47265 and 71 Hayden Pike, North Vernon, Indiana 47265

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T079-7572-00010	
Issued by: Felicia R. George, Assistant Commissioner Office of Air Management	Issuance Date: September 23, 1998

First Administrative Amendment No. 079-10586 Second Administrative Amendment No. 070-11173

First Reopening No. 079-13341

First Minor Permit Modification No. 079-12808

Issuance Date: August 20, 1999 Issuance Date: September 27, 1999 Issuance Date: July 2, 2002 Issuance Date: January 12, 2001

Second Minor Permit Modification No.: 079-16437	Pages Modified: 6, 34c, 34d, 34e, 40b
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:Ocatober 16, 2002

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(2) One (1) paint line, identified as Line B, with four (4) paint booths (each booth using HVLP guns, each booth using dry filters for particulate matter control, and each booth exhausting to their respective stacks, identified as S/V9, S/V10, S/V11, and S/V12): two (2) manual booths, identified as EU9 and EU10, and two (2) robot paint booths, identified as EU11 and EU12.

Line A and Line B each have a maximum capacity of 4.0 gallons/hour of conductive copper paint, a maximum capacity of 2.5 gallons/hour of conductive silver paint and a maximum capacity of 2.0 gallons/hour with conductive black paint.

Located in Plant 3 (125 West Hayden Pike, North Vernon, Indiana 47625)

- (1) One (1) paint line, identified as Plant 3, Line 3, with three (3) paint booths, identified as EU13, EU14, and EU15, with a maximum capacity of 437 plastic parts per hour total, equipped with HVLP spray guns and dry filters for particulate matter control, exhausting to S/V 13, SV14, and S/V15 respectively.
- (2) One (1) paint line, identified as Plant 3, Line 4, consisting of three (3) spray booths, identified as EU-19, EU-20, and EU-21, with a maximum capacity of 625 parts per hour total, equipped with HVLP spray equipment, controlled by fabric filters, exhausting through stacks identified as SV-19, SV-20, and SV-21.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary operation which spray paints plastic and metal parts that also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Four (4) curing ovens: two (2) 100,000 Btu/hr natural gas fired ovens located in Plant 1, identified as 6A, and 7A, exhausting to respective stacks identified as S/V 15 and S/V16; two (2) 1.0 mmBtu/hr ovens located in Plant 2, identified as 8B and 9B exhausting to their respective stacks identified as S/V13 and S/V14.
- (b) Two (2) infra-red (IR) ovens, located in Plant 1, identified as 9A and 10A.
- (c) Two (2) natural gas fired ovens located in Plant 3, identified as Oven-1 and Oven-2, exhausting to S/V3-1 and S/V3-2 respectively, rated at 1.2 mmBtu/hr, each.
- (d) One (1) air make-up unit, located in Plant 3, identified as AM-1, rated at 6.0 mmBtu/hr.
- (e) Two (2) infra-red (IR) ovens, located in Plant 3, identified as Oven-IR3 and Oven-IR4.

# A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary operation which spray paints plastic and metal parts is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

2<sup>nd</sup> Minor Permit Modification No. 079-16437 Modified By: Madhurima D. Moulik Page 34c of 41

OP No. T079-7572-00010

Erler Industries North Vernon, Indiana Permit Reviewer: Felicity L. Lao

#### **SECTION D.4**

# **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)] - Plant 3, Line 3 and Line 4

# Located in Plant 3

- (1) One (1) paint line, identified as Plant 3, Line 3, with three (3) paint booths, identified as EU13, EU14, and EU15, with a maximum capacity of 437 plastic parts per hour total, equipped with HVLP spray guns and dry filters for particulate matter control, exhausting to S/V 13, SV14, and S/V15 respectively.
- (2) One (1) paint line, identified as Plant 3, Line 4, consisting of three (3) spray booths, identified as EU-19, EU-20, and EU-21, with a maximum capacity of 625 parts per hour total, equipped with HVLP spray equipment, controlled by fabric filters, exhausting through stacks identified as SV-19, SV-20, and SV-21.

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.4.1 General Reduction Requirements for New Facilities [326 IAC 8-1-6]

The input VOC to Plant 3, Line 3 (EU13, EU14 and EU15) and Plant 3, Line 4 (EU-19, EU-20, and EU-21) each shall be limited to less than 25.0 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with this limit makes 326 IAC 8-1-6 not applicable.

# D.4.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to Administrative Amendment No. 079-11173-00010, issued on September 27, 1999, the PM from Plant 3, Line 3 shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

Pursuant to 326 IAC 6-3-2, the surface coating operations at Plant 3, Line 3, and Plant 3, Line 4, shall follow the following work practices and control technologies:

Dry filters shall be in operation at all times that EU-13, EU-14, EU-15, EU-19, EU-20, and EU-21 are in operation subject to the following:

- (1) The source shall operate the control device in accordance with manufacturer's specifications.
- (2) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:

- (A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

Erler Industries
North Vernon, Indiana
Permit Reviewer: Felicity L. Lao

2<sup>nd</sup> Minor Permit Modification No. 079-16437 Modified By: Madhurima D. Moulik Page 34d of 41 OP No. T079-7572-00010

If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that no overspray is visibly detectable at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

# D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the dry filters on Plant 3, Line 3 and Plant 3, Line 4.

#### **Compliance Determination Requirements**

# D.4.4 Testing Requirements [326 IAC 2-7-6(1), (6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

# D.4.5 Volatile Organic Compounds (VOC)

Compliance with the VOC usage limitations contained in Condition D.4.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.4.6 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when Plant 3, Line 3 and Plant 3, Line 4 are in operation.

# D.4.7 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks, S/V13, S/V14, S/V15, SV-19, SV-20, and SV-21 while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the

# Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.4.8 Record Keeping Requirements [326 IAC 2-7-6]

(a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.4.1.

Erler Industries North Vernon, Indiana Permit Reviewer: Felicity L. Lao 2<sup>nd</sup> Minor Permit Modification No. 079-16437 Modified By: Madhurima D. Moulik

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- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
- (2)A log of the dates of use;
- (3)The cleanup solvent usage for each month;
- (4) The total VOC usage for each month; and
- (5) The weight of VOCs emitted for each compliance period.
- To document compliance with Condition D.4.7, the Permittee shall maintain a log of daily (b) overspray observations, daily and weekly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.4.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

2<sup>nd</sup> Minor Permit Modification No. 079-16437 Modified By: Madhurima D. Moulik

Erler Industries North Vernon, Indiana Permit Reviewer: Felicity L. Lao

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

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OP No. T079-7572-00010

# Part 70 Quarterly Report

Source Name:	Erler Industries, I	nc.

Source Address: 418 Stockwell Street, North Vernon, Indiana 47265

and 71 Hayden Pike, North Vernon, Indiana 47265

Mailing Address: PO Box 219, North Vernon, Indiana 47265

Part 70 Permit No.: 079-7572-00010

Facility: Plant 3/Line 4 (EU19, EU20, EU21)

Parameter: VOC

Limit: Less than 25.0 tons per year

YEAR:		
1 – / 11 1 .		

	Column 1	Column 2	Column 1 + Column 2	
Month	This Month	Previous 11 Months	12 Month Total	
Month 1				
Month 2				
Month 3				

9	No deviation occurred in this quarter.
9	Deviation/s occurred in this quarter.  Deviation has been reported on:
Submitt Title / P Signatu Date: Phone:	Position:

# Indiana Department of Environmental Management Office of Air Quality

# Technical Support Document (TSD) for a Minor Source Modification and Minor Permit Modification to a Part 70 Operating Permit

# **Source Background and Description**

Source Name: Erler Industries

Source Location: 418 Stockwell Street, North Vernon, Indiana 47265

and 71 Hayden Pike, North Vernon, Indiana 47265

County: Jennings SIC Code: 3479

Operation Permit No.: 079-7572-00010
Operation Permit Issuance Date: September 23, 1998

Minor Source Modification No.: 079-16237

Minor Permit Modification No.: 079-16437

Permit Reviewer: Madhurima D. Moulik

The Office of Air Quality (OAQ) has reviewed a modification application from Erler Industries relating to the operation of a plastic and metal parts spray painting facility.

# History

Erler Industries was issued a Part 70 permit on September 23, 1998. An application was received on July 23, 2002, requesting the addition of an additional line to the existing surface coating facilities at the site, including three (3) spray booths.

# **New Emission Units and Pollution Control Equipment**

(1) One (1) paint line, identified as Plant 3, Line 4, consisting of three (3) spray booths, identified as EU-19, EU-20, and EU-21, with a maximum capacity of 625 parts per hour total, equipped with HVLP spray equipment, controlled by fabric filters, exhausting through stacks identified as SV-19, SV-20, and SV-21.

#### **Source Definition**

This plastic and metal parts spray painting facility consists of three (3) plants:

- (a) Plant 1 is located at 418 Stockwell Street, North Vernon, Indiana 47265; and
- (b) Plant 2 is located at 71 Hayden Pike, North Vernon, Indiana 47265; and
- (c) Plant 3 is located at 418 Stockwell Street, North Vernon, Indiana 47265.

Since the three (3) plants are located in contiguous properties, have the same SIC codes and are owned by one (1) company, they will be considered one (1) source.

# **Existing Approvals**

The source was issued a Part 70 Operating Permit T 079-7572-00010 on September 23, 1998. The source has since received the following:

- (a) First Administrative Amendment No.: 079-10586, issued on August 20, 1999;
- (b) First Significant Source Modification No.: 079-11008, issued on September 27, 1999;
- (c) Second Administrative Amendment No.: 079-11173, issued on September 27, 1999;
- (d) First Reopening No.: 079-13341, issued on February 7, 2002;
- (e) First Minor Source Modification No.: 079-12803, issued on December 15, 2000; and
- (f) First Minor Permit Modification No.: 079-12808, issued on January 12, 2001.

#### Enforcement Issue

There are no enforcement actions pending.

# **Stack Summary**

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
SV-19	Paint Booth EU-19	27	2.4	15,000	70
SV-20	Paint Booth EU-20	27	2.4	15,000	70
SV-21	Paint Booth EU-21	27	2.4	15,000	70

# Recommendation

The staff recommends to the Commissioner that the Minor Source Modification and Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 23, 2002. Additional information was received on August 7, 2002.

# **Emission Calculations**

See Appendix A of this document for detailed emissions calculations.

#### Potential To Emit of the Modification Before Limitations

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	7.08

PM-10	7.08
SO <sub>2</sub>	-
VOC	35.58
СО	-
NO <sub>x</sub>	=

HAP's	Potential To Emit (tons/year)
Xylene	6.26
MIBK	1.10
Ethylbenzene	1.57
TOTAL	8.93

### **Limited Potential to Emit**

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

Pollutant	<b>PM</b> (tons/yr)	PM <sub>10</sub> (tons/yr)	SO <sub>2</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO <sub>x</sub> (tons/yr)
Proposed Modification	0.07	0.07	0.00	Less than 25	0.00	0.00
Proposed Overall Source Limits				249		
PSD Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply. The source is proposing to take a VOC limit of 25 tons per year for the new surface coating line in order to avoid the applicability of 326 IAC 8-1-6. The source is also proposing to take an overall source-wide VOC limit of 249 tons per year. Therefore, this source will remain an existing minor PSD source.

### **Justification for the Modification**

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification and Minor Permit Modification. The minor source modification is being performed pursuant to 326 IAC 2-7-10.5(d)(5) which states in part that minor source modification can be used for "modifications for which the potential to emit is limited to twenty-five (25) tons per year of any regulated pollutant other than hazardous air pollutants". The minor permit modification is being performed pursuant to 326 IAC 2-7-12(b)(1)(B) for modifications which "do not involve significant changes to existing monitoring, reporting, or record keeping requirements in the Part 70 permit".

# **County Attainment Status**

The source is located in Jennings County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
$NO_2$	attainment
Ozone	attainment

CO	attainment			
Lead	attainment			

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Jennings County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Jennings County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

# **Source Status**

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	0.086
PM-10	0.086
SO2	0.0
VOC	249
СО	0.18
NOx	1.23

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions were based on the Technical Support Document for Minor Source Modification No. 079-12803-00010, issued December 15, 2000.

#### **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) This source will not be subject to the New Source Performance Standards (NSPS), 326 IAC 12, 40 CFR 60, Subpart TTT (Surface Coating of Plastic Parts for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines). The source surface coats cellular telephones, which are under SIC 3663. This SIC is not considered as business machines. Therefore, the requirements of 40 CFR 60, Subpart TTT are not applicable.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (326 IAC 14 and 40 CFR Part 63) applicable to this source.

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North Vernon, Indiana Minor Source Modification No. 079-16237
Permit Reviewer: Madhurima D. Moulik Minor Permit Modification No. 079-16437

# 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Rules)

The total source potential to emit of VOCs is limited to less than 250 tons per twelve (12) consecutive month period and it is not one of the 28 listed source categories.

Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

# 326 IAC 2-4.1 (New Source Toxics Control)

This source is not a major source of HAPs because the potential to emit of a single HAP is less than 10 tons per year, and less than 25 tons per year of any combination of HAPs; therefore, 326 IAC 2-4.1 is not applicable.

# 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in Jennings County and has the potential to emit more than one hundred (100) tons per year of VOCs. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

# 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### State Rule Applicability - Individual Facilities

326 IAC 8-1-6 (General Provisions Relating to VOC Rules: General Reduction Requirements for New Facilities)

The source has agreed to limit the VOC emissions from new surface coating line to twenty-five (25) tons per year. Therefore, the BACT requirements under 326 IAC 8-1-6 do not apply.

# 326 IAC 6-3-2 (Process Operations)

PM emissions from EU-19, EU-20, and EU-21 shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, subject to the following:

- (1) The source shall operate the control device in accordance with manufacturer's specifications.
- (2) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:
  - (A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

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North Vernon, Indiana Minor Source Modification No. 079-16237
Permit Reviewer: Madhurima D. Moulik Minor Permit Modification No. 079-16437

(B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that no overspray is visibly detectable at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

# **Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

EU-19, EU-20, and EU-21 have applicable compliance monitoring conditions as specified below:

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, daily observations shall be made of the overspray from the surface coating booth stacks, SV-19, SV-20, SV-21 while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) The dry filters shall be in operation at all times that EU-19, EU-20, and EU-21 are in operation subject to the following:
  - (1) The source shall operate the control device in accordance with manufacturer's specifications.
  - (2) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:
    - (A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
    - (B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that no overspray is

Erler Industries North Vernon, Indiana Minor Source Modification No. 079-16237 Permit Reviewer: Madhurima D. Moulik Minor Permit Modification No. 079-16437

visibly detectable at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

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These monitoring conditions are necessary because the dry filters must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

#### **CHANGES TO PART 70 PERMIT**

The following are the changes to the Part 70 permit (bold to show additions and strikeout to show deletions):

(1) The facility description in Section A.2 is modified as follows:

Located in Plant 3 (125 West Hayden Pike, North Vernon, Indiana 47625)

- (1) One (1) paint line, identified as Plant 3, Line 3, with three (3) paint booths, identified as EU13, EU14, and EU15, with a maximum capacity of 437 plastic parts per hour total, equipped with HVLP spray guns and dry filters for particulate matter control, exhausting to S/V 13, SV14, and S/V15 respectively.
- (2) One (1) paint line, identified as Plant 3, Line 4, consisting of three (3) spray booths, identified as EU-19, EU-20, and EU-21, with a maximum capacity of 625 parts per hour total, equipped with HVLP spray equipment, controlled by fabric filters, exhausting through stacks identified as SV-19, SV-20, and SV-21.
- (2) The facility description in Section D.4 is modified as follows:

Facility Description [326 IAC 2-7-5(15)] - Plant 3, Line 3, and Line 4

Located in Plant 3

- One (1) paint line, identified as Plant 3, Line 3, with three (3) paint booths, identified as (1) EU13, EU14, and EU15, with a maximum capacity of 437 plastic parts per hour total, equipped with HVLP spray guns and dry filters for particulate matter control, exhausting to S/V 13, SV14, and S/V15 respectively.
- (2) One (1) paint line, identified as Plant 3, Line 4, consisting of three (3) spray booths, identified as EU-19, EU-20, and EU-21, with a maximum capacity of 625 parts per hour total, equipped with HVLP spray equipment, controlled by fabric filters, exhausting through stacks identified as SV-19, SV-20, and SV-21.
- (3) Condition D.4.1 is modified as follows:
  - D.4.1 General Reduction Requirements for New Facilities [326 IAC 8-1-6]

The input VOC to Plant 3, Line 3 (EU13, EU14 and EU15) and Plant 3, Line 4 (EU-19, EU-20, and EU-21) each shall be limited to less than 25.0 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit makes 326 IAC 8-1-6 not applicable.

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- (4) Condition D.4.2 is modified as follows:
  - D.4.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to Administrative Amendment No. 079-11173-00010, issued on September 27, 1999, the PM from Plant 3, Line 3 shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour; and  $P =$  process weight rate in tons per hour

Pursuant to 326 IAC 6-3-2, the surface coating operations at Plant 3, Line 3, and Plant 3, Line 4, shall follow the following work practices and control technologies:

Dry filters shall be in operation at all times that EU-13, EU-14, EU-15, EU-19, EU-20, and EU-21 are in operation subject to the following:

- (1) The source shall operate the control device in accordance with manufacturer's specifications.
- (2) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:
  - (A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
  - (B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that no overspray is visibly detectable at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

- (5) Condition D.4.3 is modified as follows:
  - D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the dry filters on Plant 3, Line 3, and Plant 3, Line 4.

- (6) Condition D.4.6 is modified as follows:
  - D.4.6 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when Plant 3, Line 3 and Plant 3, Line 4 is in operation.

- (7) Condition D.4.7 is modified as follows:
  - D.4.7 Monitoring
  - (a) Daily inspections shall be performed to verify the placement, integrity and particle loading

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of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks, S/V13, S/V14, and S/V15, SV-19, SV-20, and SV-21 while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(8) A Part 70 Quarterly Report is added to demonstrate compliance with the VOC limit for Plant 3, Line 4.

#### Appendix A: Emissions Calculations VOC and Particulate From Surface Coating Operations

Company Name: Erler Industries, Inc.

Address City IN Zip: 418 Stockwell Street, North Vernon, IN

CP: 079-16437 Plt ID: 079-00010 Reviewer: Madhurima D. Moulik

Date: August 7, 2002

Material	Density (Lb/Gal)		Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)		Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Base Coat	8.0	78.75%	0.0%	78.8%	0.0%	21.25%	0.00143	625.000	6.30	6.30	5.62	134.95	24.63	2.66	29.65	60%
Clear Coat	8.0	49.78%	0.0%	49.8%	0.0%	50.22%	0.00100	625.000	4.00	4.00	2.50	60.03	10.96	4.42	7.97	60%

State Potential Emissions

Add worst case coating to all solvents

8.12

194.98

35.58

7.08

#### **METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \* (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

# **Appendix A: Emissions Calculations**

HAPs - Surface coating Spray Booth

Company Name: Erler Industries, Inc.

Address City IN Zip: 418 Stockwell Street, North Vernon, IN

CP: 079-16437 Plt ID: 079-00010

Reviewer: Madhurima D. Moulik

Date: August 7, 2002

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % MEK	Weight % MIBK	Weight % Ethylben- zene	Weight % Glycol Ethers	Weight % Toluene	Xylene Emissions (ton/yr)	MEK Emission s (ton/yr)		Ethylben zene Emission (ton/yr)	⊨tner	Toluene Emission (ton/yr)
Base Coat	8	0.0014	625.00	20.00%	0.00%	0.00%	5.00%	0.00%	0.00%	6.26	0.00	0.00	1.57	0.00	0.00
Clear Coat	8.04	0.0010	625.00	0.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00	0.00	1.10	0.00	0.00	0.00

Potential to Emit =

6.26	0.00	1.10	1.57	0.00	0.00

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs